

Annual Report
University of Idaho, Cooperative Park Studies Unit
Cooperative Agreement #1443-CA9000-95-018

1 October 1998-30 September 1999

Introduction

The Cooperative Park Studies Unit (CPSU) at the University of Idaho has a cooperative agreement with the National Park Service (NPS), Columbia Cascade Support Office to undertake a variety of social science activities. This annual report addresses current subagreements 7, 9, 13, and 17 for all active projects within fiscal year 1999. The report is organized by major projects undertaken in response to each subagreement and modification. Each modification is referenced in the left margin.

A. Subagreement 7: Cooperative Park Studies Unit Activities

The CPSU activities under subagreement 7 include a wide variety of social science research projects, research publications, a scholarship program, technical assistance, and other project management activities.

Modification 8 Socioeconomic Regional Atlas
As part of the CPSU's work on ecosystem management, a socioeconomic atlas prototype for parks was initiated. Four pilot parks were chosen and agreed to participate in the study—Mount Rainier National Park, Wilson's Creek National Battlefield, Harpers Ferry National Historical Park, and Joshua Tree National Park. Each pilot park defined an area of interest composed of the counties along its borders. A list of 85 socioeconomic indicators was sent to these pilot parks. Each park chose 15 indicators, in addition to the 17 core indicators that will be mapped for each area. The majority of the data files have been completed.

Modification 8 Recreational Fee Demonstration Program
Research continued to evaluate the NPS Recreational Fee Demonstration Program. The University of Montana completed its study evaluating the NPS Fee Demonstration Program through visitor surveys in 13 park units. A Research Summary has been drafted.

The management assessment of the NPS Fee Demonstration Program through the collaboration of Pennsylvania State University, University of Wisconsin, and Utah State University has been extended (at the request of the Fee Demonstration Program) until April 2000 to include additional analyses. A Phase III survey was developed and reviewed.

A workshop was held in Washington, DC with staff from the Fee Demonstration Program to provide input into the development of the backcountry fee survey and the national survey of the American public.

Modification 9 Change in reporting requirements.

Modification 10 Social Science Program Web Site
The internet web site for the NPS Social Science Program (at <http://www.nps.gov/socialscience>) received continued use and continues to be updated. Site content was reviewed extensively, as part of an update.

Modification 10 Canon National Parks Science Scholars Program
The Canon National Parks Science Scholars Program was coordinated by the CPSU. The CPSU acted as liaison with the American Association for the Advancement of Science and the National Park Foundation, in addition to Canon U.S.A., Inc. Announcements and applications for the 1999 competition were prepared, widely distributed, and posted on the web site in January. Student proposals were submitted and evaluated in June. In August, eight winning proposals were selected and an additional three honorable mention awards were granted. There are currently 13 scholars in the program. This year, one scholar completed his Ph.D. The satisfactory progress of the 1997 and 1998 scholars was confirmed by their dissertation committee chairs prior to the signing of the contracts in September for the 1999-2000 academic year. In September, planning was underway for the 1999 Canon National Parks Science Scholars Awards Ceremony and Symposium and an annual report was being prepared.

Modification 10 Technical Assistance
Technical assistance and training to parks, regions, WASO and the Department of the Interior was provided. CPSU staff:

- reviewed four technical documents and reports,
- organized and conducted seven peer reviews of technical reports,
- provided technical advice to the Division of Interpretation, Ranger Activities, Fee Demonstration Program, Affirmative Action Program, Office of the Director, Office of the Assistant Secretary – Water and Science.

Technical assistance to the Urban Recreation Research Center at Southern University and A&M College at Baton Rouge, Louisiana was provided. Dr. Machlis:

- served as adjunct faculty member
 - reviewed draft needs assessment
 - reviewed draft strategic plan
 - made two site visits
 - participated in URRC advisory committee
- assisted in preparing three cooperative agreement modifications

Modifications 8
and 10

Social Science Research

Social science research projects were initiated in the areas of:

- developing and advancing the Visitor Experience and Resource Protection (VERP) Framework,
- economic impacts (advancing the money generation model),
- developing and advancing social carrying capacity methodologies,
- conducting an NPS national survey of the American public, and
- determining the effect of the NPS Recreational Fee Demonstration Program on backcountry users in selected national parks.

A request for proposals (RFP) for these projects was widely distributed between 15 January 1999 and the 1 April deadline. Approximately 380 were sent out. In addition, the RFP was advertised in the *Commerce Business Daily* for seven days. Thirty-nine proposals were received and reviewed by a review panel of NPS managers and independent scientists. Three proposals were selected. Subcontracts were finalized and the projects are on schedule.

Oregon State University (OSU) was subcontracted to complete the study on the effect of the Fee Demonstration Program on backcountry users. OSU has submitted the first quarterly progress report and drafted the questionnaires to be used in Everglades and Grand Canyon National Parks.

Northern Arizona University (NAU) was subcontracted to complete a national survey of the American public regarding park visitation. NAU has submitted the first quarterly progress report and has drafted an initial version of the telephone survey, pre-tested it, and sent it out for review.

Michigan State University (MSU) was subcontracted to advance and test the Money Generation Model (MGM). MSU has submitted the first quarterly report and has made progress in setting up data sets and models according to the proposed schedule.

No proposals were submitted for the VERP study, and no acceptable proposals were submitted for the carrying capacity study. Proposals for carrying capacity research will be re-solicited in early FY00.

Modifications 10
and 12

Social Science Research Review Series

The *Social Science Research Review* series was established this year. The series consists of individual papers focused on particular topics of interest to park managers. The purpose of the papers is to provide a basis for scientific understanding of the specific issue. Each paper presents a conceptual framework for understanding the issue, reviews methodologies used in relevant studies, and presents key findings from the published scientific literature, technical reports, and other documents. Each paper is peer reviewed. Copies of the papers are distributed to all parks and NPS offices, to NPS partners (e.g., BRD science centers), and others.

Modification 7 The first issue of the series is entitled “The Effect of Mechanical Noise and Natural Sound on Visitor Experiences in Units of the National Park System” by Dr. James Gramann at Texas A&M University. The second issue is entitled “Race, Ethnicity and Use of the National Park System” by Dr. Myron Floyd, also of Texas A&M University. A third issue was prepared for publication and distribution in late 1999, entitled “Employee Safety in the National Park Service” by Dr. Seth Tuler of Clark University.

Modifications 11 and 13 Future issues will include a paper on carrying capacity (Spring 2000) to be prepared by Dr. Glenn Haas at Colorado State University. Another paper will be prepared on public involvement, by Dr. Jo Ellen Force of the University of Idaho. The public involvement effort will be a collaboration with the Alaska Support Office and include, in addition to the review paper with an Alaskan case study, a training manual, pilot training course in public involvement to take place in Alaska, and a final, comprehensive report on the application of public involvement training in other regions and units of the National Park System.

Subagreement 9: Visitor Services Project and Visitor Survey Card Activities

The Visitor Services Project (VSP) conducts in-depth visitor surveys at up to 10 park units each year. The Visitor Survey Card (VSC) assists units within the National Park System to conduct a customer satisfaction survey to help the NPS measure and respond to goals outlined in the Government Performance and Results Act (GPRA). Both projects are included in subagreement 9 of the cooperative agreement.

Modifications 4 and 9 During this year, 3 parks chose to include several questions in their questionnaires regarding interpretive services that will provide data for the Harpers Ferry Design Center. These parks were: Rock Creek Park, Lassen Volcanic National Park, and Cumberland Gap National Historical Park. Data was collected at all three parks.

Modifications 11 and 12 Budget corrections.

Modification 16 Change in reporting requirements.

Modification 17 Visitor Services Project Studies

See also: Final reports were completed for FY98 visitor surveys conducted at:

- Modifications 9, 10, and 13
- Jean Lafitte National Park and Preserve,
 - Chattahoochee River National Recreation Area,
 - Cumberland Island National Seashore,
 - Iwo Jima/Netherlands Carillon (part of the George Washington Memorial Parkway),
 - National Monuments and Memorials (National Mall),
 - Klondike Gold Rush National Historical Park,
 - Whiskeytown National Recreation Area, and
 - Acadia National Park.

Closing workshops were held in each park.

Modification 17
See also:
Modifications 14
and 15

VSP studies were initiated this year in the following units:

- New Bedford Whaling National Historical Park,
- St. Croix National Scenic River,
- Kenai Fjords National Park,
- Big Cypress National Preserve,
- Lassen Volcanic National Park,
- Rock Creek Park,
- Glacier Bay National Park,
- Cumberland Gap National Historical Park and
- San Juan National Historic Site.

Modification 17 The annual meeting of the VSP Advisory Committee was held in Washington, DC. The parks for 2000 were selected.

Progress on the database during this year has been limited to exploring different options for keeping it updated, operational, and readily accessible by users.

The VSP prepared its annual report on visitors, *Serving the Visitor 1998: A Report on Customers of the National Park Service*, and distributed the publication in September 1999. The VSC results for 1998 were included in the report.

No newsletters were produced this year.

The establishment of a VSP website is planned.

Visitor Survey Card

During FY99, the VSC finalized the reporting for the FY98 surveys, delivering the last individual park reports and delivering final reports at the cluster, region and system-wide levels.

A technical audit was completed and a report submitted to WASO in May.

The survey card was printed for FY99 with improvements to the design and layout. A Spanish version of the survey card was made available this year. In FY99 a single VSC Workbook was provided to parks (including all of the information contained in last year's VSC Workbooks 1 and 2) with additional guidelines for card distribution.

In FY99, 324 NPS units implemented the VSC survey. The scanning and data coding were subcontracted to Visual Input Systems Analysts, Inc., also the vendor for FY98. As of 30 September 1999 survey results have been sent to 232 parks; all parks will receive their results by 12 December 1999. System-wide, region, and cluster reports will be delivered to the NPS by 26 December 1999.

A VSC database is planned, in conjunction with the VSP database. Data files from FY98 and FY99 surveys are among the files maintained by the VSC.

The Visitor Services Project hired a new full-time research support scientist this year to assist in the visitor surveys. In addition, a temporary staff of three was hired to administer VSP surveys during the summer. A full-time survey assistant was hired by the VSC. All full-time staff were given performance evaluations.

Modification 18 Washington State University was subcontracted to conduct research in “Determinants of Response Rates in National Park Satisfaction Surveys” to improve the VSP survey technique. The research began in mid-July. The first progress report has been submitted. Investigators have tentatively identified nine parks and individual variables, and a regression model has been developed. Revisions to the proposed analysis will follow a review by a private consultant and NPS personnel.

Subagreement 13: NPS Social Science Program

The UI CPSU manages the NPS Social Science Program, and Dr. Machlis serves as the NPS Visiting Chief Social Scientist. Subagreement 13 specifies the reporting requirements for the Social Science Program.

Modifications 3 and 4 Semi-annual Reports
Semi-annual reports are due 1 February and 1 June of each fiscal year. This is a change in previous reporting requirements that was finalized after 1 February of 1999. A semi-annual progress report was completed for 1 June 1999 and posted online at http://www.nps.gov/socialscience/waso/6_99ssrp.pdf.

Subagreement 17: Visitor Risk

Subagreement 17 was established specifically for work on NPS visitor risk assessment and visitor safety. In fiscal year 1999, a scope of work and request for proposals was drafted and reviewed by the Risk Management office of the NPS, for competition in 2000.

Publications and Presentations

Bergerson, T. "The NPS Visitor Survey Card: First Year Survey and Implications for Park Management." Accepted by *Park Science* for inclusion in the special issue on social science.

Bergerson, T. "The NPS Visitor Survey Card: First Year Survey and Implications for Park Management," presented at the 1999 George Wright Society Conference, Asheville, North Carolina, March 23, 1999.

Bergerson, T. 1999. *Visitor Survey Card Project FY98 Technical Audit*. 1999. Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.

Floyd, M. 1999. "Race, Ethnicity and Use of the National Park System." In *Social Science Research Review*. 1(2):1-24.

Gramann, J. 1999. "The Effect of Mechanical Noise and Natural Sound on Visitor Experiences in Units of the National Park System." In *Social Science Research Review*. 1(1):1-16.

Littlejohn, M. "Visitor Surveys: A Key to Connecting Interpretation and Tourism Providers," presented at the National Association of Interpretation Conference, Anchorage, Alaska, October 3, 1998.

Machlis, G.E., gave eight guest lectures in classes at the University of Idaho, the University of Arizona, and Western High School in Baltimore, Maryland, during FY99.

Machlis, G.E. "Integrating the Social Sciences into Ecosystems Research," presentation at the Committee on Environment and Natural Resources' Strategic Ecological Science Retreat, Shephardstown, West Virginia, January 7, 1999.

Machlis, G.E. "Cultural Diversity in the National Park Service," presentation at the National Parks and Conservation Association's educational forum, *America's Parks-America's People: A Mosaic in Motion*, San Francisco, California, January 14, 1999.

Machlis, G.E., J.E. McKendry, and J. Ficker. "Current Activities of the National Park Service Social Science Program," presentation at the George Wright Society Conference, Asheville, North Carolina, March 26, 1999.

Machlis, G.E. "Demographic Projections for the National Park Service Intermountain Region and the United States (1995-2025)," presented at the 1999 Intermountain Region Superintendents' Conference, Santa Fe, New Mexico, April 28, 1999.

Machlis, G.E. "Faust's Bargain and the Human Ecosystem," university-wide Inaugural Undergraduate Core Curriculum Lecture, University of Arizona, Tucson, Arizona, February 16, 1999.

Machlis, G.E. "Human Dimensions of Ecosystem Management," panel discussion at the Joint Session of the American Sociological Association Section on Environment and Technology and the Rural Sociological Society Natural Resources Research Group, Rural Sociological Society

Annual Meeting, Chicago, Illinois. August 8, 1999.

Machlis, G.E. "Land Matters: Wilderness in Modern America," National Wilderness Stewardship Training Course, Arthur Carhart National Wilderness Training Center, Ruby's Reserve Street Inn, Missoula, Montana, August 27, 1999.

Machlis, G.E. "The 7% Solution: Restructuring the Federal Environmental Science Budget to Integrate the Social Sciences," presentation to Environmental Protection Agency's Science Advisory Board, Washington, DC, September 22, 1999.

Machlis, G.E. "The 7% Solution: Restructuring the Social Science Budgets of the Federal Land Management and Environmental Research Agencies," seminar presentation to the USDA Forest Service, Washington, DC, March 4, 1999.

Machlis, G.E. "Usable Knowledge: Social Science for Protected Area Management," presentation to Market Information Network, Parks Canada, Banff National Park, Banff, Alberta, Canada, September 1, 1999.

Machlis, G.E. and T. Bergerson. "Understanding Visitor Satisfaction with Park Experiences," presentation at the NPS training course *GPRA 202: Provide for Public Enjoyment and Visitor Experience*, Lakewood, Colorado, March 10, 1999.

Machlis, G.E., and J. Ficker. "The 7% Solution: Restructuring the Science Budgets of Federal Land Management & Research Agencies," presentation at the George Wright Society Conference, Asheville, North Carolina, March 23, 1999.

Machlis, G.E., M. Littlejohn, and T. Bergerson. 1999. *Serving the Visitor 1998: A Report on Customers of the National Park Service*. Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.

Visitor Services Project Visitor Survey Reports:

- *Jean Lafitte NHP* (December 1998)
- *Chattahoochee River NRA* (December 1998)
- *Cumberland Island NS* (January 1999)
- *Iwo Jima/Netherlands Carillon* (January 1999)
- *Klondike Gold Rush NHP (AK)* (February 1999)
- *National Capital Parks-Central* (March 1999)
- *Whiskeytown-Shasta-Trinity NRA* (May 1999)
- *Acadia NP* (May 1999)

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